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Activity 4 - Structure Testing Practice Questions

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The Doctor's Surgery

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Task Scenario

- You have been asked to create a database for the East Berkshire Doctors Surgery.
- Currently all records are stored on a spreadsheet.
- The surgery would like to be able to store and report on surgery visits.
- Currently staff have two types of speciality – GP and Nurse.
- The surgery would like to have more specialised doctors and nurses in the future, but each member of staff will continue to have a single speciality.

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Task Scenario

- The database will record information about:
- Staff
- Patients
- The appointments on a given day.

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Task Scenario

Each doctor must see at least one patient in a day and a patient cannot see more than one doctor in a day.

An Appointment can be a single or a double session identified as 1 or 2.

There are two types of patient: Private and NHS. Privately funded patients are sent a bill of £50 for each visit to the Doctor.

A doctor cannot see more than 2 privately funded patients in a single day.

When an appointment is made the staff and the patient are selected.

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The Data.

Appointment ID	Staff ID	Patient ID	Staff Specialty	Appointment Date	Appointment Type	House Number	Specialty ID	Postcode	Patient Type	Staff Surname	Patient Surname
1	1	27	GP	27/07/2020	1	5	1	RG4 8NP	Private	Smith	Iqbal

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Testing

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How To Carry Out Testing

- In order to test if your database works, you will need some test data.
- You could use data that you know will work.
- You may need to use data that is deliberately wrong.
- This is to make sure that your database rejects any data that is incorrect.
- This is your test data.
- You are testing your database to make sure it works with **GOOD** and **BAD** data.

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How To Carry Out Testing

For example, if you have a column that expects a word **NO BIGGER** than 8 letters.

You need to test it with a 6-letter word, and this should be **FINE.**

You need to test it with a 10-letter word, and this should make your database show an **ERROR MESSAGE.**

If you do not see an error message, then you have not configured your database properly.

You would need to check with both pieces of data to make sure your database is working.

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The Types of Test Data

Imagine we have table of Customers.

One of the table columns is “Age”.

It is designed with the datatype Integer.

A typical piece of data that could be entered is 47.

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The Types of Test Data

Test Data Type	Letter	Meaning	Example
Normal	N	Ordinary data that can be input into a column	Enter 47 into the Age column
Erroneous			
Extreme			

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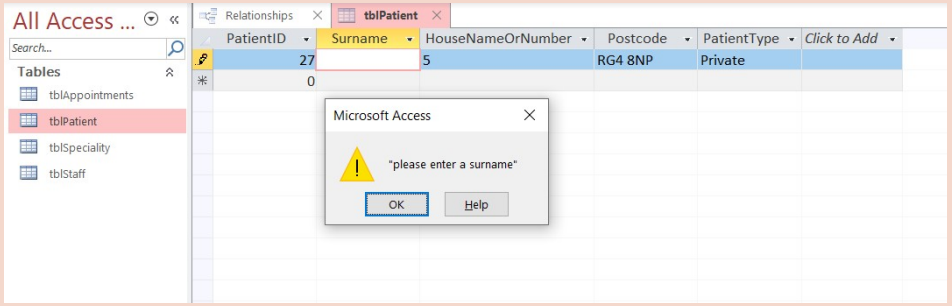
Test 1 - a patient record will not save without the surname of the patient being present

Test No.	Type of Test (N,R,X)	Test Data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)	Only complete this column if the results are not as expected
1	X	nothing	An error message will be displayed		

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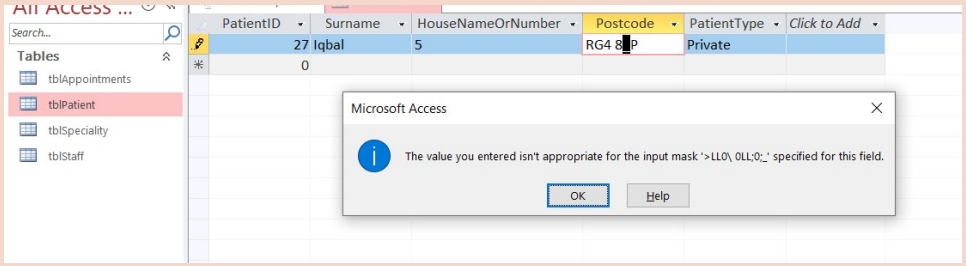
Test 2 - a patient record will not save if the postcode is not in the correct format

Test No.	Type of Test (N,R,X)	Test Data	Expected results	Add screenprint(s) of the results of this test (and any retests) Ensure you show the test data used in the screenprint(s)	Only complete this column if the results are not as expected
2	R	RG4 8P	An error message will be displayed		

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